

Amendments to the Claims:

1. (Currently Amended) A battery charger comprising:

a variable alternating-current power supply configured to output a first alternating current of a controllable power level;

a digital controller configured to control said power supply, the control including at least control of the power level of the first alternating current;

a foil-type first transformer configured to change the voltage of the first alternating current to a second alternating current; and

a rectifier configured to convert the second alternating current to a direct-current direct-current output.

2. (Original) The battery charger of claim 1, said power supply being a variable-frequency generator and said digital controller being configured to control the frequency of said first alternating current.
3. (Original) The battery charger of claim 1, said charger being configured to charge at a plurality of direct-current output voltages.
4. (Original) The battery charger of claim 3, the charger being configured to automatically determine the voltage of the battery and supply the correct output voltage and current.
5. (Original) The battery charger of claim 1, said charger being configured to charge at up to about 100 amps.
6. (Original) The battery charger of claim 1, said charger being configured to charge at up to about 100 volts.
7. (Original) The battery charger of claim 1, said charger further comprising a foil-type second transformer configured to supply power to said controller.
8. (Original) The battery charger of claim 1, said charger further comprising a filter configured to filter said direct-current output.
9. (Original) The battery charger of claim 1, said controller being configured to measure the voltage of said direct current output.